

## Title (en)

Soluble shell polymer composition and method for its preparation

## Title (de)

Lösliche Hüllenpolymerzusammensetzung und Verfahren zu deren Herstellung

## Title (fr)

Composition de polymère d'enveloppe soluble et son procédé de préparation

## Publication

**EP 2567990 A1 20130313 (EN)**

## Application

**EP 12180558 A 20120815**

## Priority

US 201161532142 P 20110908

## Abstract (en)

The present invention relates to a soluble shell polymer composition comprising an alkali soluble emulsion polymer shell and an alkali insoluble emulsion polymer core, which composition is stabilized by a surfactant of the formula  $R-(OCH_2CH_2)_2-6OSO_3-M+$ , where R is a linear, branched, or cyclic C 8 -C 24 alkyl or C 12 -C 18 aralkyl group and M + is a counterion. The invention further relates to a method of preparing the composition and its use as a binder in coatings formulations. Formulations prepared with the soluble shell polymer composition have excellent freeze-thaw profiles and hiding.

## IPC 8 full level

**C08F 265/06** (2006.01); **C08F 2/22** (2006.01); **C08F 230/02** (2006.01); **C08K 3/22** (2006.01); **C09D 151/06** (2006.01)

## CPC (source: EP KR US)

**C08F 20/10** (2013.01 - KR); **C08F 265/00** (2013.01 - KR); **C08F 265/06** (2013.01 - EP US); **C08L 33/04** (2013.01 - KR); **C09D 133/04** (2013.01 - KR); **C09D 151/06** (2013.01 - EP US); **C08F 230/02** (2013.01 - EP US)

## C-Set (source: EP US)

**C08F 265/06 + C08F 2/22**

## Citation (applicant)

US 7705082 B2 20100427 - PORZIO ROBERT SHANE [US], et al

## Citation (search report)

- [X] EP 1433797 A1 20040630 - ROHM & HAAS [US]
- [X] EP 1398333 A1 20040317 - ROHM & HAAS [US]

## Cited by

KR20150006351A; CN109913025A; EP2955199A1; AU2015202748B2; AU2015202748B9; US9932431B2

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## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

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## DOCDB simple family (application)

**EP 12180558 A 20120815**; AU 2012216399 A 20120823; BR 102012021942 A 20120830; CN 201210328028 A 20120906; KR 20120099379 A 20120907; US 201213597335 A 20120829